

a clustering module stored on the medium ~~that determines~~, the clustering module operative to determine at least one cluster of documents within the vector space, each cluster corresponding to a subset of documents within the vector space containing a subject term; and

a sense position determining module stored on the medium, the sense position module operative to determine an implicit position within the vector space of at least one sense of the subject term, the implicit position corresponding to at least one determined cluster.

Claim 15 as amended:

15. In a collection of documents, each document containing a plurality of terms, a computer program product for discerning the presence of at least one sense of a subject term when executed on a computer system, the computer program product comprising:

a computer-readable medium;

a matrix-forming module stored on the medium, the matrix-forming module operative to form an m by n matrix, where each matrix element (i, j) corresponds to the number of occurrences of term i in document j ;

a singular value decomposition and dimensionality reduction module stored on the medium and coupled to the matrix forming module, the singular value decomposition and dimensionality reduction module operative to form a latent semantic indexed vector space from the matrix;

a clustering module stored on the medium, the clustering module operative to determine at least one cluster of documents within the vector space, each cluster corresponding to a subset of documents within the vector space containing a subject term; and

a sense position determining module stored on the medium, the sense position module operative to determine an implicit position within the vector space of at least one sense of the subject term, the implicit position corresponding to at least one determined cluster.
